

**METHOD AND APPARATUS FOR POSITIONING A
TOOL RELATIVE TO A WORKPIECE**

ABSTRACT OF THE DISCLOSURE

5 An apparatus for positioning a tool relative to a workpiece, including
a first carrier rotatable on a first axis and a second carrier carried by the first carrier
and rotatable about a second axis defined by the first carrier. The second axis is
in a parallel and offset eccentric relationship to the first axis. A tool holder is
secured to the second carrier in an offset eccentric relationship to the second axis,
and a drive mechanism selectively rotatably drives the first carrier about the first
10 axis and the second carrier about the second axis to selectively position the tool
holder. A tool secured in the tool holder may be moved along a selected path
relative to a workpiece